

AMENDMENTS TO THE CLAIMS

1-51 (Cancelled)

52. (Currently Amended) An isolated protein produced by expression from a first nucleic acid sequence within a nucleic acid molecule, wherein:

(a) said first nucleic acid sequence encodes a *Dermatophagoides farinae* mapB protein, wherein ~~an antibody produced against a protein having the amino acid sequence of SEQ ID NO:15 selectively binds to~~ said encoded *Dermatophagoides farinae* mapB protein is bound by an immunoglobulin epsilon (IgE) antibody from a patient allergic to *Dermatophagoides farinae*; and

(b) a second nucleic acid sequence which is operatively linked to said first nucleic acid sequence and promotes expression of said first nucleic acid sequence.

53. (Previously presented) The isolated protein of Claim 52, wherein said isolated protein comprises an amino acid sequence at least about 90% identical to SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21.

54. (Previously presented) The isolated protein of Claim 52, wherein said isolated protein comprises the amino acid sequence of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21.

55. (Previously presented) The isolated protein of Claim 52, wherein said isolated protein consists of the amino acid sequence of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21.

56. (Currently amended) An isolated protein encoded by a polynucleotide sequence of at least 150 nucleotides in length, wherein said polynucleotide sequence of at least 150

nucleotides in length hybridizes in a solution comprising 1X SSC and 0% formamide at a temperature of about 50° C to a nucleic acid sequence selected from the group consisting of SEQ ID NO:16, SEQ ID NO:19 and SEQ ID NO:22, wherein ~~an antibody produced against a protein having the amino acid sequence of SEQ ID NO:15 specifically binds~~ said isolated protein is bound by an immunoglobulin epsilon (IgE) antibody from a patient allergic to *Dermatophagoides farinae*.

57. (Previously presented) The isolated protein of Claim 56, wherein said isolated protein is encoded by a nucleic acid sequence at least about 95% identical to a nucleic acid sequence selected from SEQ ID NO:14, SEQ ID NO:17 or SEQ ID NO:20.

58. (Previously presented) The isolated protein of Claim 56, wherein said isolated protein is encoded by a nucleic acid sequence comprising a sequence selected from SEQ ID NO:14, SEQ ID NO:17 or SEQ ID NO:20.

59. (Previously presented) The isolated protein of Claim 56, wherein said isolated protein is encoded by a nucleic acid sequence selected from SEQ ID NO:14, SEQ ID NO:17 or SEQ ID NO:20.

60. (Currently amended) An isolated protein selected from the group consisting of:

- (a) an isolated protein comprising an at least 30 contiguous amino acid region identical in sequence to an at least 30 amino acid region from SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21; and
- (b) an isolated protein comprising an amino acid sequence at least about 90% identical to a sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21,

wherein ~~an antibody produced against a protein having the amino acid sequence of SEQ ID NO:15 selectively binds to~~ said isolated protein of (a) or (b) is bound by an immunoglobulin epsilon (IgE) antibody from a patient allergic to *Dermatophagoides farinae*.

61. (Previously presented) The isolated protein of Claim 60, wherein said isolated protein comprises an amino acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21.

62. (Previously presented) The isolated protein of Claim 60, wherein said isolated protein consists of an amino acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:18 or SEQ ID NO:21.

63. (Previously presented) The isolated protein of Claim 60, wherein said isolated protein comprises an epitope having at least one identifying characteristic selected from the group consisting of:

- (a) said epitope is resistant to β -elimination of peptides;
- (b) said epitope is resistant to Proteinase-K digestion; and
- (c) said epitope is reactive to a test designed to detect glycosylated proteins,

wherein an IgE selected from the group consisting of canine IgE from dogs allergic to mites and feline IgE from cats allergic to mites selectively binds to said epitope.

64. (Previously presented) A kit for testing if an animal is susceptible to or has an allergic response to a mite, said kit comprising the isolated protein of Claim 60.

65. (Previously presented) A therapeutic composition for treating an allergic response to a mite comprising the isolated protein of Claim 60.